



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0297; Project Identifier 2019-SW-062-AD;

Amendment 39-21614; AD 2021-13-09]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Airbus Helicopters Model SA330J helicopters, all serial numbers. This AD was prompted by reports of the failure of the lower bearing cage of the main rotor hub (MRH) flapping hinges and of the presence of metallic particles at the bottom of a drag hinge. This AD requires repetitive inspections of the MRH chip detectors, or for helicopters not equipped with chip detectors, repetitive inspections of the oil for contamination by metallic particles, and corrective actions if necessary, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For material incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000;

email: ADs@easa.europa.eu; Internet: www.easa.europa.eu. You may find this material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. It is also available in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0297.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0297; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Mahmood G. Shah, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5538; email: mahmood.g.shah@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2019-0157, dated July 3, 2019 (EASA AD 2019-0157) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for Airbus Helicopters Model SA330J helicopters, all serial numbers.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model SA330J helicopters,

all serial numbers. The NPRM published in the *Federal Register* on April 13, 2021 (86 FR 19157). The NPRM was prompted by reports of the failure of the lower bearing cage of the MRH flapping hinges and of the presence of metallic particles at the bottom of a drag hinge. The NPRM proposed to require repetitive inspections of the MRH chip detectors, or for helicopters not equipped with chip detectors, repetitive inspections of the oil for contamination by metallic particles, and corrective actions if necessary, as specified in an EASA AD.

The FAA is issuing this AD to address failure of the lower bearing cage of the MRH flapping hinges and presence of metallic particles at the bottom of a drag hinge, which could lead to loss of flapping hinge function, resulting in MRH unbalance and loss of control of the helicopter. See the MCAI for additional background information.

Discussion of Final Airworthiness Directive

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes.

The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information Under 1 CFR Part 51

EASA AD 2019-0157 specifies procedures for repetitive inspections of the MRH chip detectors, or for helicopters not equipped with chip detectors, repetitive inspections of the oil for contamination by metallic particles, and corrective actions if necessary. Corrective actions include replacement of the incidence hinge bearings, replacement of the flapping bearing race and bearing or if there is no degradation reinstallation of the bearing race and bearing 180° from the marked position during removal, and replacement of the drag lower bearing race and bearing. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Interim Action

The FAA considers this AD interim action. The investigation to detect the root cause of the reported failures of the lower bearing cage of the MRH flapping hinges and presence of metallic particles at the bottom of the drag hinge is on-going.

Costs of Compliance

The FAA estimates that this AD affects 4 helicopters of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
4 work-hours X \$85 per hour = \$340	\$0	\$340	\$1,360

The FAA estimates the following costs to do any necessary on-condition replacements that would be required based on the results of any required actions. The FAA has no way of determining the number of helicopters that might need these on-condition replacements:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
24 work-hours X \$85 per hour = \$2,040	\$53,025.29	\$55,065.29

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-13-09 Airbus Helicopters: Amendment 39-21614; Docket No. FAA-2021-0297; Project Identifier 2019-SW-062-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters Model SA330J helicopters, certificated in any category, all serial numbers.

(d) Subject

Joint Aircraft System Component (JASC) Code 6200, Main Rotor System.

(e) Reason

This AD was prompted by reports of the failure of the lower bearing cage of the main rotor hub (MRH) flapping hinges and of the presence of metallic particles at the bottom of a drag hinge. The FAA is issuing this AD to address failure of the lower bearing cage of the MRH flapping hinges and presence of metallic particles at the bottom

of a drag hinge, which could lead to loss of flapping hinge function, resulting in MRH unbalance and loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2019-0157, dated July 3, 2019 (EASA AD 2019-0157).

(h) Exceptions to EASA AD 2019-0157

(1) Where EASA AD 2019-0157 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2019-0157 does not apply to this AD.

(3) Where EASA AD 2019-0157 refers to flight hours (FH), this AD requires using hours time-in-service.

(4) Although the service information referenced in EASA AD 2019-0157 specifies to discard certain parts, this AD requires removing those parts from service.

(i) Special Flight Permit

Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the helicopter can be modified (if the operator elects to do so), provided the helicopter is operated during the day under visual flight rules with no passengers are onboard.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the

manager of the International Validation Branch, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

For more information about this AD, contact Mahmood G. Shah, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: 817-222-5538; email: mahmood.g.shah@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2019-0157, dated July 3, 2019.

(ii) [Reserved]

(3) For EASA AD 2019-0157, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; Internet: www.easa.europa.eu. You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

This material may be found in the AD docket on the Internet at

<https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0297.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to

<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on July 2, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-14688 Filed: 7/9/2021 8:45 am; Publication Date: 7/12/2021]